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ABSTRACT

American-style comprehensive high school (CHS) systems were started in Japan and Taiwan in 1994 and 1996, respectively. Most CHSs in Taiwan were transformed from senior vocational schools, whereas others were changed from senior high schools or newly founded. To assist these schools in successfully restructuring or designing new programs, a researcher visited 13 educational institutes in the United States and Japan to determine the status and learn about their experiences with the CHS system. Using a four-stage approach (description, interpretation, juxtaposition, comparison), data were collected, collated, interpreted, juxtaposed, and compared. In the United States, CHS occupational programs usually offered occupational skill development in four or five occupational areas due to budget constraints and student numbers. In Japan, the CHS program was obviously an integration of academic and occupational learning; its occupational programs were very career development oriented. In Taiwan, occupational programs in CHSs focus on occupations related to tertiary-level industries. The following recommendations were made: Taiwanese CHSs must help students decide on career pathways in grade 10; Taiwanese students should be enrolled through attendance boundaries and school of choice; Taiwanese CHSs should also serve students who want to pursue higher education; and more efforts should be made to assess community and student needs when occupational programs are developed or redesigned. (YLB)

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# A Comparison of Occupational Programs in Comprehensive High Schools in the U.S.A., Japan and Taiwan

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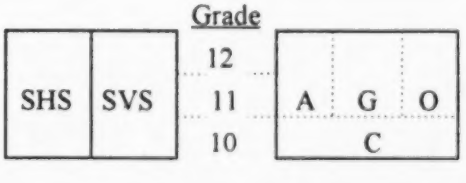
**Abstract**

America-style comprehensive high school (CHS) systems were started in Japan and Taiwan in 1994 and 1996, respectively. Most CHS's in Taiwan were transformed from senior vocational schools (SVS's), and others were changed from senior high schools (SHS's) or newly founded. In order to assist these schools to successfully restructure or design new programs, the author visited 13 educational institutes in the U.S.A. and Japan to determine the status and learn about their experiences with the CHS system. Based on field visitation and a review of related literature, a comparison of occupational programs in CHS's in the USA, Japan and Taiwan is made and some implications for Taiwan are suggested.

**Introduction and Purpose**

In Taiwan, academic-oriented SHS's and occupational-oriented SVS's have been separated. The occupational programs in these SVS's have normally been three year occupational preparation programs (see Figure 1, Left). Sponsored and directed by the Ministry of Education (MOE), 18 SHS's or SVS's began to try out a three-year (grades 10-12) American-style CHS in the 1996 school year. Students in this system are required to take one-year core courses in 10th grade and to select one of the following three pathways at the beginning of grade 11: academic (college bound), occupational (job-training-oriented), and general (a mix of academic and occupational options). This occupational program provides students with only two years of occupational preparation (see Figure 1, Right). After July 1, 1997, the number of CHS's in Taiwan will increase to 44. Because every CHS is required to offer at least two occupational programs for students to choose from, all 44 schools must restructure or develop a new design for their occupational programs.




Legend
A: Academic Programs
C: Core Courses
G: General Programs
O: Occupational Programs

Figure 1. Separated SHS and SVS (Left) and CHS (Right).

The CHS system has been widely used in the U.S.A. for a long time and Japan implemented its CHS system in 1994. In order to learn about experiences with CHS in the USA and Japan to suggest further CHS reforms in Taiwan, the author with the sponsorship of the MOE participated in a mission which visited 13 educational institutes related to CHS in the U.S.A. and Japan in May 1997. As a result of this field visitation and a review of related literature, a comparison of occupational programs in

the CHS's in the U.S.A., Japan and Taiwan was made and implications for Taiwan are suggested in this paper.

**Conceptual Bases and Significance of This Study**

In Taiwan, a CHS curriculum planning team was organized in 1994 to assist the MOE to guide CHS program development. As the co-director of the planning team, the author was expected to counsel educators involved in CHS development concerning curriculum rationale and design, which included the design of occupational programs. This comparative study in education mainly contributed to a better understanding of education at home and educational reform. Accordingly, a comparative study on occupational programs in CHS's in the U.S.A., Japan and Taiwan is crucial and can enhance international understanding.

**Procedures and Methods**

Employing Beready's four-stage approach (i.e., description-interpretation-juxtaposition-comparison) (Trethewey, 1976), the author collected and collated data relevant to this topic in three countries, then interpreted, juxtaposed and compared the collected data, and finally drew conclusions. As mentioned before, the country-specific data were collected through a field visitation and a literature review.

**Findings and Conclusions**

In the U.S.A., occupational programs found in CHS's usually offer occupational skill development in selected vocational fields (Ryan & Imel, 1996). Due to budget constraints and student numbers, these programs are often limited to four or five occupational areas. In larger cities, area vocational centers and magnet schools in vocational education often support CHS's by offering vocational courses. In Japan, the CHS (called "integrated course") program is obviously an integration of academic and occupational learning, so its occupational programs are very career-development-oriented (Donohue, 1992; Ministry of Education, Science and Culture, 1993). Those program graduates who want to be directly employed may receive good training in firm-based or public training centers. In Taiwan, occupational programs in CHS's focus on occupations related to tertiary-level industries. Every CHS is required to offer at least two programs for students to choose from. The main themes of CHS occupational programs in these three countries are shown in Table 1.

A least, the following indications can be found in Table 1:

1. American CHS's normally last four years and provide a longer time (two years) for students to explore career options prior to entering occupational programs. This means that Taiwanese CHS's must effectively help their students decide on career pathways in grade 10.
2. American middle-school graduates are normally geographically admitted to neighborhood high schools or geographically-transported to magnet high schools, so

CHS students are more "comprehensive" than are students in Japanese and Taiwanese CHS's which mainly admit students based on an entrance examination. This suggests that Taiwanese CHS students should be enrolled through attendance boundaries and school of choice.

3. Individual development of students is emphasized based on CHS learner outcome in all three countries, but the CHS's in both America and Japan achieve more integration of academic and occupational learning than do those in Taiwan. This implies that occupational programs in Taiwanese CHS's should serve not only those students who want to directly enter the workplace, but also those who want to pursue further study in institutions of higher education through adaptive course offerings.
4. CHS's in both America and Japan are primarily public, but a large part of the CHS's in Taiwan are private. This indicates that more effort should be made to enhance goal-attainment, cross-school cooperation, etc., for the CHS occupational programs.

Table 1. Main Themes of CHS Occupational Programs in the U.S.A., Japan and Taiwan

| Focus | U.S.A | Japan | Taiwan |
|---|---|---|---|
| CHS Length (years) | 4, mainly | 3 | 3 |
| Occupational Program Length (years) | 2 | 2 | 2 |
| Student Admission | *Neighborhood<br>*Magnet | *Neighborhood<br>*Magnet<br>*Bidding screening[1] | * Bidding screening |
| Learner Outcomes | *Equal opportunity<br>*Development of individual potential<br>*Satisfaction of workforce needs | *Full development of personality<br>*Flexibility<br>*Responsibility | *Adaptability<br>*Flexibility<br>*Satisfaction of workforce needs |
| Learning Process | * New emphasis:<br>-School-to-work transition<br>-Tech Prep | *Career cluster<br>*Individualized study program | *Core fields plus options<br>*Basic and employable skills |
| Organization | Decentralized | Centralized | Centralized |
| School | Public | Public, mainly | Private and public |

## Implications and Recommendations

Honolulu, Hawaii, U.S.A., is an international city in which the West meets the East and has many Taiwanese, Japanese and American residents. Many claim that they can tell Taiwanese houses there from Japanese and American houses by the yard plants. In the front- and back-yards of their houses, Americans like to grow flowers and grasses, Japanese like to grow trees, and Taiwanese like to grow fruit trees and vegetables. Risking oversimplification, these preferences may be linked to that the American preference for "diversity," the Japanese preference for "uniqueness," and the Taiwanese preference for "practicality."

In terms of practicality and in line with the findings noted earlier, Taiwan should adopt the strengths found in both American and Japanese CHS systems and fit them to the context in Taiwan. Based on this comparative study, at least the following four recommendations for occupational programs in Taiwanese CHS's can be made: (1) In light of program goals, a compromise between specific job training and broad career development should be made. (2) In view of the preceding requirement, the integration of academic and occupational learning should be strengthened. (3) In order to increase students' options, more programs should be offered by strengthening cross-school cooperation. (4) More efforts should be made to assess community and student needs when occupational programs are developed or redesigned.

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## Footnotes

[1] In a bidding screening mechanism, candidates who obtain higher exam scores have higher priority in choosing schools.

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